

[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2013-0967; Directorate Identifier 2013-CE-042-AD]

RIN 2120-AA64

Airworthiness Directives; PIAGGIO AERO INDUSTRIES S.p.A Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for PIAGGIO AERO INDUSTRIES S.p.A Model P-180 airplanes that would supersede an existing AD. This proposed AD results from mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as cases of un-commanded operation of switched off nose-wheel steering system caused by internal leakage of a steering select/bypass valve, which could lead to loss of directional control on ground during take-off or landing, possibly resulting in a runway excursion. We are issuing this proposed AD to require actions to address the unsafe condition on these products.

DATES: We must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments by any of the following methods:

- Federal eRulemaking Portal: Go to http://www.regulations.gov. Follow the instructions for submitting comments.
 - Fax: (202) 493-2251.

- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE. Washington, DC 20590.
- Hand Delivery: U.S. Department of Transportation, Docket Operations, M-30,
 West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE.
 Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday, except
 Federal holidays.

For service information identified in this proposed AD, contact Piaggio Aero Industries S.p.A - Airworthiness Office, Via Luigi Cibrario, 4-16154 Genova-Italy; phone: +39 010 6481353; fax: +39 010 6481881; email: airworthiness@piaggioaero.it; Internet: http://www.piaggioaero.com/#/en/aftersales/service-support. You may review copies of the referenced service information at the FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148.

Examining the AD Docket

You may examine the AD docket on the Internet at http://www.regulations.gov by searching for and locating it in Docket No. FAA-2013-0967; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (telephone (800) 647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Mike Kiesov, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4144; fax: (816) 329-4090; email: mike.kiesov@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES section. Include "Docket No. FAA-2013-0967; Directorate Identifier 2013-CE-042-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD because of those comments.

We will post all comments we receive, without change, to http://regulations.gov, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

Discussion

On December 30, 2009, we issued AD 2009-21-08 R1, Amendment 39-16169 (75 FR 904, January 7, 2010). That AD required actions intended to address an unsafe condition on the products listed above.

Since we issued AD 2009-21-08 R1, Amendment 39-16169 (75 FR 904, January 7, 2010), the manufacturer has developed a modification that will terminate the required repetitive functional tests required in AD 2009-21-08 R1.

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, has issued AD No. 2013-0242R1, dated October 9, 2013 (referred to after this as "the MCAI"), to correct an unsafe condition for the specified products.. The MCAI states:

Cases of un-commanded operation of switched off nose-wheel steering system were reported. Internal leakage of a Steering Select/Bypass Valve, installed in the nose landing gear (NLG) Steering Manifold, was identified as a failure cause.

This condition, if not detected and corrected, could lead to loss of

directional control on ground during take-off or landing, possibly resulting in a runway excursion.

To address this unsafe condition, EASA issued AD 2009-0129 to require repetitive functional checks of the Steering Manifold to verify internal leakage proofness and accomplishment of the functional check upon installation of a replacement Steering Manifold on an aeroplane.

Since that AD was issued, PAI issued Service Bulletin (SB) 80-0249 at revision 3, providing improved testing procedures.

For the reasons described above, this AD retains the requirements of EASA AD 2009-0129, which is superseded, but requires accomplishment of the functional checks in accordance with the improved procedures and additionally, before release to service of an aeroplane after installation of a replacement NLG. This AD also introduces an optional modification, which constitutes terminating action for the repetitive functional checks required by this AD.

This AD is revised to introduce a relieving compliance time for aeroplanes earlier inspected in accordance with EASA AD 2009-0129.

You may examine the MCAI on the Internet at http://www.regulations.gov by searching for and locating it in Docket No. FAA-2013-0967.

Relevant Service Information

PIAGGIO AERO INDUSTRIES S.p.A has issued Mandatory Service Bulletin N. 80-0249, Rev. 3, dated July 22, 2013; Recommended Service Bulletin N. 80-0285, and Recommended Service Bulletin N. 80-0286, Rev. 1, both dated September 30, 2013. The actions described in this service information are intended to correct the unsafe condition identified in the MCAI.

FAA's Determination and Requirements of the Proposed AD

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to our bilateral agreement with this State of Design Authority, they have notified us of the unsafe condition described in

the MCAI and service information referenced above. We are proposing this AD because we evaluated all information and determined the unsafe condition exists and is likely to exist or develop on other products of the same type design.

Costs of Compliance

We estimate that this proposed AD will affect 112 products of U.S. registry. We also estimate that it would take about 2 work-hours per product to comply with the basic functional test requirements of this proposed AD. The average labor rate is \$85 per work-hour.

Based on these figures, we estimate the cost of the proposed AD on U.S. operators to be \$19,040, or \$170 per product.

In addition, we estimate the following cost to do the proposed optional modification to terminate the proposed required repetitive functional tests. For Model P-180 Avanti airplanes, it would take about 40 work-hours and require parts costing \$2,000, for a cost of \$5,400 per product. For Model P-180 Avanti II airplanes, it would take about 40 work-hours and require parts costing \$4,000, for a cost of \$7,400 per product. We have no way of determining the number of operators that may choose this optional action.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This proposed regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
 - (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by removing Amendment 39-16169 (75 FR 904, January 7, 2010), and adding the following new AD:

PIAGGIO AERO INDUSTRIES S.p.A: Docket No. FAA-2013-0967; Directorate Identifier 2013-CE-042-AD.

(a) Comments Due Date

We must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

This AD supersedes AD 2009-21-08 R1, Amendment 39-16169 (75 FR 904, January 7, 2010).

(c) Applicability

This AD applies to PIAGGIO AERO INDUSTRIES S.p.A Model P-180 airplanes, serial numbers 1004 through 1218, certificated in any category.

(d) Subject

Air Transport Association of America (ATA) Code 32: Landing Gear.

(e) Reason

This AD was prompted by mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as cases of un-commanded operation of switched off nose-wheel steering system caused by internal leakage of a steering select/bypass valve. We are issuing this AD to prevent loss of directional control on ground during take-off or landing, which could result in a runway excursion.

(f) Actions and Compliance

Unless already done, do the actions required in paragraphs (f)(1) through (f)(5) of this AD, including all subparagraphs:

- (1) At whichever of the compliance times specified in paragraphs (f)(1)(i) and (f)(1)(ii) of this AD that occurs first and repetitively thereafter at intervals not to exceed 165 hours TIS, do a functional test of the nose landing gear (NLG) steering manifold following Part A2 of the ACCOMPLISHMENT INSTRUCTIONS in PIAGGIO AERO INDUSTRIES S.p.A. Service Bulletin (Mandatory) N. 80-0249, Rev. 3, dated July 22, 2013 (includes CONFIRMATION SLIP).
- (i) Within the next 165 hours time-in-service (TIS) after the effective date of this AD or within the next 6 months after the effective date of this AD, whichever occurs first; or
- (ii) Within the next 165 hours TIS after the last inspection done in compliance with AD 2009-21-08 R1, Amendment 39-16169 (75 FR 904, January 7, 2010).
- (2) Within the next 220 hours TIS or the next 6 months after the effective date of this AD, whichever occurs first, and repetitively thereafter at intervals not to exceed 660 TIS or 12 months, whichever occurs first, do a functional test of the nose landing gear (NLG) steering manifold following Part A1 of the ACCOMPLISHMENT INSTRUCTIONS in PIAGGIO AERO INDUSTRIES S.p.A. Service Bulletin (Mandatory) N. 80-0249, Rev. 3, dated July 22, 2013 (includes CONFIRMATION SLIP).
- (3) If, during any functional test required in paragraphs (f)(1) and (f)(2) of this AD, any NLG steering actuator movement discrepancy is detected, before further flight, replace the NLG steering manifold with a serviceable part as specified in Part A1 and Part A2 of the ACCOMPLISHMENT INSTRUCTIONS in PIAGGIO AERO INDUSTRIES S.p.A. Service Bulletin (Mandatory) N. 80-0249, Rev. 3, dated July 22, 2013 (includes CONFIRMATION SLIP).

- (4) As of the effective date of this AD, installation of a replacement NLG steering manifold or a replacement NLG is allowed, provided that, before release to service, the NLG steering manifold passes a functional test following Part A1 of the ACCOMPLISHMENT INSTRUCTIONS in PIAGGIO AERO INDUSTRIES S.p.A. Service Bulletin (Mandatory) N. 80-0249, Rev. 3, dated July 22, 2013.
- (5) To terminate the repetitive functional tests required in paragraphs (f)(1) and (f)(2) of this AD, at any time after the initial functional test required in paragraphs (f)(1) and (f)(2) of this AD, you may modify the electrical configuration of the steering system following the ACCOMPLISHMENT INSTRUCTIONS in PIAGGIO AERO INDUSTRIES S.p.A. Service Bulletin (Recommended) N. 80-0285, dated September 20, 2013 (includes CONFIRMATION SLIP), or the ACCOMPLISHMENT INSTRUCTIONS in PIAGGIO AERO INDUSTRIES S.p.A. Service Bulletin (Recommended) N. 80-0286, Rev. 1, dated September 20, 2013, as applicable.

(g) Other FAA AD Provisions

The following provisions also apply to this AD:

- (1) Alternative Methods of Compliance (AMOCs): The Manager, Standards Office, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Mike Kiesov, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4144; fax: (816) 329-4090; email: mike.kiesov@faa.gov.
- (i) Before using any approved AMOC on any airplane to which the AMOC applies, notify your appropriate principal inspector (PI) in the FAA Flight Standards District Office (FSDO), or lacking a PI, your local FSDO.
- (ii) AMOCs approved for AD 2009-21-08 R1 (75 FR 904, January 7, 2010) are not approved for AMOCs for this AD.

- (2) **Airworthy Product:** For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.
- (3) **Reporting Requirements:** For any reporting requirement in this AD, a federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2120-0056. Public reporting for this collection of information is estimated to be approximately 5 minutes per response, including the time for reviewing instructions, completing, and reviewing the collection of information. All responses to this collection of information are mandatory. Comments concerning the accuracy of this burden and suggestions for reducing the burden should be directed to the FAA at: 800 Independence Ave. SW, Washington, DC 20591, Attn: Information Collection Clearance Officer, AES-200.

(h) Related Information

Refer to European Aviation Safety Agency (EASA) AD No. 2013-0242R1, dated October 9, 2013, for related information. You may examine the MCAI on the Internet at http://www.regulations.gov by searching for and locating it in Docket No. FAA-2013-0967. For service information related to this AD, contact Piaggio Aero Industries S.p.A - Airworthiness Office, Via Luigi Cibrario, 4-16154 Genova-Italy; phone: +39 010 6481353; fax: +39 010 6481881; email: airworthiness@piaggioaero.it;

Internet: http://www.piaggioaero.com/#/en/aftersales/service-support. You may review

copies of the referenced service information at the FAA, Small Airplane Directorate, 901

Locust, Kansas City, Missouri 64106. For information on the availability of this material

at the FAA, call (816) 329-4148.

Issued in Kansas City, Missouri on November 5, 2013.

Earl Lawrence,

Manager, Small Airplane Directorate,

Aircraft Certification Service.

[FR Doc. 2013-27837 Filed 11/19/2013 at 8:45 am; Publication Date: 11/20/2013]

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